

Notice of Allowability	Application No.	Applicant(s)	
	09/681,665	SIM, SIEW YONG	
	Examiner Anh-Vu H. Ly	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to amendment and petition for revival filed December 14, 2005.
2. The allowed claim(s) is/are 1-34.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date Nov. 2, 2004.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 1/10/05; 5/13/05; 2/12/05; 10/11/05; 11/28/05
4. Examiner's Comment Regarding Requirement for Deposit 1/27/06
of Biological Material
7/26/06
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark L. Watson on August 10, 2006.

The application has been amended as follows:

In The Claims

1. (Currently Amended) A method for distributing content of a large payload file to a plurality of storage devices in a network ~~node~~ comprising:
obtaining a plurality of block files representing content of a large payload file for storage in a plurality of storage devices in a network ~~node~~, including:
evaluating said large payload file to locate a portion having substantive content;
determining if said content from said large payload file comprises linear
characteristics by determining if said substantive content is located at a starting end of said large
payload file;
generating a track file if said content comprises said linear characteristics;
generating a plurality of track files if said content does not comprise said linear characteristics;

determining at least one desired block size, if said content comprises linear characteristics, dividing a track file to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size; and

if said content does not comprise linear characteristics, dividing each of said the plurality of track files to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size;

associating said plurality of block files with said plurality of storage devices; storing said plurality of block files in said plurality of storage devices based on said associations; and

creating a virtual file, using said associations, for presentation to a client requesting said content, said virtual file providing an illusion to said client that said content is contiguous in said network node..

3. (Currently Amended) The method of claim 1, wherein said obtaining a plurality of block files further comprises:

obtaining said large payload file from a user[;].

~~evaluating said large payload file to locate a portion having substantive content;~~

~~determining if said content from said large payload file comprises linear characteristics by determining if said substantive content is located at a starting end of said large payload file;~~
and

~~generating a track file if said content comprises said linear characteristics; generating a plurality of track files if said content does not comprise said linear characteristics.~~

12. (Currently Amended) A method for distributing content of a large payload file to a plurality of storage devices in a network ~~node~~ comprising:

obtaining a plurality of block files representing content of a large payload file for storage in a plurality of storage devices in a network ~~node~~, including:

evaluating said large payload file to locate a portion having substantive content;

determining if said content from said large payload file comprises linear

characteristics by determining if said substantive content is located at a starting end of said large payload file;

generating a track file if said content comprises said linear characteristics;

generating a plurality of track files if said content does not comprise said linear characteristics;

determining at least one desired block size, if said content comprises linear characteristics, dividing a track file to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size; and

if said content does not comprise linear characteristics, dividing each of said the plurality of track files to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size;

associating said plurality of block files with said plurality of storage devices; wherein said associating comprises creating associations by distributing said plurality of block files amongst said plurality of storage devices such that said plurality of storage devices are load balanced during input/output operations;

storing said associations in a file metadata in said plurality of storage devices, said associations comprising information for rebuilding said large payload file from said block files;

storing said plurality of block files in said plurality of storage devices based on said associations;

creating a virtual file, using said associations, for presentation to a client requesting said ~~file~~ content, said virtual file providing an illusion to said client that said ~~file~~ content is contiguous in said network ~~node~~.

13. (Currently Amended) A computer program product comprising:

a computer ~~usable~~ readable medium comprising computer readable code for distributing content of large payload file to a plurality of storage devices in a network ~~node~~, said computer readable program code configured to:

obtain a plurality of block files representing content of a large payload file for storage in a plurality of storage devices in a network ~~node~~, including:

evaluate said large payload file to locate a portion having substantive content;
determine if said content from said large payload file comprises linear
characteristics by determining if said substantive content is located at a starting end of said large
payload file;

generate a track file if said content comprises said linear characteristics;
generating a plurality of track files if said content does not comprise said linear characteristics;

determine at least one desired block size, if said content comprises linear characteristics, dividing a track file to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size; and

if said content does not comprise linear characteristics, dividing each of said the plurality of track files to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size;

associate said plurality of block files with said plurality of storage devices; store said plurality of block files in said plurality of storage devices based on said associations;

create a virtual file, using said associations, for presentation to a client requesting said file content, said virtual file providing an illusion to said client that said file content is contiguous in said network node.

15. (Currently Amended) The computer program product of claim 13, wherein said obtain a plurality of block files comprises:

obtain said large payload file from a user[;].

~~evaluate said large payload file to locate a portion having substantive content;~~

~~determine if said content from said large payload file comprises linear characteristics by determining if said substantive content is located at a starting end of said large payload file; and generate a track file if said content comprises said linear characteristics; generating a plurality of track files if said content does not comprise said linear characteristics.~~

24. (Currently Amended) An apparatus for distributing content of a large payload file to a plurality of storage devices in a network node comprising:

one or more first servers in a first serer cluster of a network node obtaining a plurality of block files representing content of a large payload file for storage in a plurality of storage devices

in said network ~~node~~, said one or more first servers associating said plurality of block files with said plurality of storage devices and storing said plurality of block files in said plurality of storage devices based on said associations;

one or more second servers in a second server cluster of said network ~~node~~ creating a virtual file, using said associations, for presentation to a client requesting said ~~file~~ content, said virtual file providing an illusion to said client that said ~~file~~ content is contiguous in said network ~~node~~; and

a third server obtaining said large payload file from a user, said third server evaluating said large payload file to locate a portion having substantive content and determining if said content from said large payload file comprises linear characteristics by determining if said substantive content is located at a starting end of said large payload file, said third server generating a track file if said content comprises said linear characteristics and transmitting said track file to said one or more first servers, and said third server generating a plurality of track files if said content does not comprise said linear characteristics and transmitting said plurality of track files to said one or more first servers.

Allowable Subject Matter

2. Claims 1-34 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest evaluating said large payload file to locate a portion having substantive content; determining if said content from said large payload file comprises linear characteristics by determining if said substantive content is located at a starting

end of said large payload file; generating a track file if said content comprises said linear characteristics; generating a plurality of track files if said content does not comprise said linear characteristics; determining at least one desired block size, if said content comprises linear characteristics, dividing a track file to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size; and if said content does not comprise linear characteristics, dividing each of the plurality of track files to generate a plurality of block files, wherein each of said block files correspond in size to said at least one desired block size, as specified in independent claims 1, 12, and 13.

The prior art does not teach or fairly suggest a third server obtaining said large payload file from a user, said third server evaluating said large payload file to locate a portion having substantive content and determining if said content from said large payload file comprises linear characteristics by determining if said substantive content is located at a starting end of said large payload file, said third server generating a track file if said content comprises said linear characteristics and transmitting said track file to said one or more first servers, and said third server generating a plurality of track files if said content does not comprise said linear characteristics and transmitting said plurality of track files to said one or more first servers, as specified in independent claim 24.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sim (US Patent No. 6,970,939 B2) discloses distributing files to a plurality of distribution stations.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

avl



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